MULTIMEDIA UNIVERSITY

STUDENT ID NO

MULTIMEDIA UNIVERSITY

FINAL EXAMINATION

TRIMESTER 3, 2021/2022

DBM5024 BUSINESS FINANCE

(All Sections/Groups)

8 AUGUST 2022
2.30 p.m – 4.30 p.m
(2 hours)

INSTRUCTIONS TO STUDENT

1. This question paper consists of 6 pages with 2 sections.
2. Attempt **ALL** questions in Section A and Section B.
3. Please write all your answers for Section A on the OMR form provided and all answers for Section B in the Answer Booklet provided.
4. The formulae are given in the appendices.

SECTION A: MULTIPLE CHOICE QUESTIONS [20 Marks]

1. Aryan's store has RM160,000 in current assets and RM84,000 in current liabilities. Any decisions related to these accounts are referred to as _____.

   A. working capital management
   B. capital structure decisions
   C. capital budgeting decisions
   D. operating management

2. Aisyah is employed as a currency trader in the Singapore financial market. Which one of the following areas of finance does her job falls into?

   A. Capital management
   B. Financial institutions
   C. Corporate finance
   D. International finance

3. Which of the statement below correctly defines a common chain of command within a corporation?

   A. The controller reports directly to the shareholder.
   B. The treasurer reports directly to the chief operating officer.
   C. The controller reports directly to the chief financial officer.
   D. The chief financial officer reports directly to the board of directors.

4. Sole proprietorship can **BEST** relate to which of the statements below?

   A. The business entity has an unlimited life.
   B. The owner enjoys limited liability for the firm's debts.
   C. The ownership can easily be transferred to another individual.
   D. Obtaining additional equity is dependent on the owner's personal finances.

5. Which one of the following statements about a limited partnership is correct?

   A. All partners are treated base on their invested capital.
   B. There must be at least one general partner.
   C. Equity financing is easy to obtain and unlimited.
   D. All partners have their losses limited to their invested capital.

6. "Total tax paid divided by the total taxable income", can be relate to?

   A. Variable tax rate
   B. Average tax rate
   C. Marginal tax rate
   D. Fixed tax rate

Continued...

7. Net working capital includes _____.

   A. a land purchase
   B. an invoice from a supplier
   C. depreciation of a warehouse
   D. the balance due on a 9-year car loan

8. Market values are _____.

   A. affected by the accounting methods selected
   B. equal to the initial cost minus the depreciation to date
   C. either remain constant or increase over time
   D. the reflection of an expected selling prices given the current economic situation

9. Majulah Guna has net working capital of RM25,800, current assets of RM39,200, equity of RM46,600, and long-term debt of RM22,100. What is the amount of the net fixed assets?

   A. RM50,300
   B. RM56,900
   C. RM45,500
   D. RM42,900

10. Forever High has a total asset of RM620,000, net fixed assets of RM380,200 and net working capital of RM51,800. What is the value of the current liabilities?

    A. RM61,700
    B. RM88,400
    C. RM188,000
    D. RM291,600

11. The weighted average cost of capital is defined as the weighted average of a firm's _____.

    A. return on all of its investments
    B. cost of equity, cost of preferred, and its after tax cost of debt
    C. pretax cost of debt and its preferred and common equity securities
    D. bond coupon rates

12. Kirana Asgar has an issue of preferred stock with an annual dividend of RM7.50 that just sold for RM62 a share. What is the cost of preferred stock for Kirana's?

    A. 12.91 percent
    B. 12.10 percent
    C. 11.23 percent
    D. 13.47 percent

Continued...

13. The market rate of return of Hijau Saujana is 11.8 percent and the risk-free rate is 3.45 percent. The company has 1.36 of beta. What is the firm's cost of equity?

A. 14.806 percent
B. 15.31 percent
C. 19.82 percent
D. 24.19 percent

14. The ex-dividend date is defined as _____ day(s) before the date of record.

A. three business
B. three
C. two business
D. four

15. The Clear Mini Market has 16,000 shares of stock outstanding at a price per share of RM5.5. What will be the price per share if the firm declares a 4-for-6 reverse stock split?

A. RM11.80
B. RM4.50
C. RM3.67
D. RM8.25

16. Ali Rekreasi just declared a 12 percent stock dividend. Which one of the following increased by 12 percent as a result of this dividend?

A. Book value of firm's equity
B. Shareholders' wealth
C. Firm's cash balance
D. Number of shares outstanding

17. All of the following are means of reducing the number of outstanding shares with the exception of a(n) _____.

A. open market purchase
B. reverse stock split
C. tender offer
D. rights offer

18. Which one of these scenarios favors a high-dividend payout?

A. Low transaction costs on trading of stock
B. Lower taxes on capital gains than on dividends
C. Corporate shareholders
D. Tax deferment on capital gains, but not on dividend income

Continued...

19. Float is defined as the difference between the _____.

A. ledger balance and the available balance
B. book balance and the available balance
C. collections and disbursements for any given period of time
D. beginning and ending cash balances

20. The primary purpose of a cash discount is to _____.

A. compensate customers for an out-of-stock item
B. compensate customers for faulty goods or services
C. offset the interest charges on an account receivable
D. induce customers to pay promptly

SECTION B: STRUCTURED QUESTIONS [80 Marks]

QUESTION 1

A. Mr Jason Han borrow RM50,000 that he will repay within the period of five years. He is being charged with an interest of 6 percent per year. Based on this information, prepare an amortization schedule for Jason Han if he is paying an equal annual payment throughout the period. (16 marks)

B. To pay for his college education, Raguvaran is saving RM1,000 at the beginning of each year for the next ten years in bank account paying 11 percent interest. How much will Raguvaran have in that account at the end of 10^{th} year? (4 marks)

(Total: 20 marks)

QUESTION 2

A. Saherman Veer Berhad is going to open up a new branch in Johor next month, December. The company is expected to raise RM4.5 million for this expansion. They shall raise the money by issuing a 15 year, zero coupon bond with a par value of RM1,000. The market yield on similar bonds is 10.5 percent.

Based on the information provided, assuming quarterly compounding, answer the following questions:

1) How many units of bonds must Saherman Veer Berhad sell to raise the money it needs? (8 marks)
2) As an investor, after 8 years the bond being issued, if Rahul sees that the current market yield on the bond is 12 percent, how much is the bond's current value? (5 marks)

Continued...

B. Kevin Storage Berhad bonds maturing in 6 years, pays 8 percent of coupon rate on an issuance of RM1,000 par value. The yield to maturity for this bond is 12 percent. Calculate the bond price if the bond is compounded semi-annually. (7 marks)

(Total: 20 marks)

QUESTION 3

A. Nur Hanisah is currently planning to invest in Berjaya Infinite Berhad. The company just paid a dividend of RM3.50 per share last year and maintain a constant growth rate of 6 percent. Nur Hanisah required a rate of return for her investment of 12 percent.

1) How much does the stock's worth today? (3 marks)
2) How much does the price of that worth stock five years from now? (4 marks)
3) If Nur Hanisah sell her stock at year 5, does she acquire capital gain or loss from this investment? Justify your answer with workings. (3 marks)

B. After a management meeting yesterday, PKJ Berhad expects that their dividend will grow over four years' time. They are expecting that the dividend will grow at 10 percent for year 1 and 8 percent for year 2. Subsequently, the company initiates to maintain a constant 8.5 percent of dividend growth rate, forever. PKJ Berhad had just paid a dividend of RM2 per share last year. If the required rate of return on this share is 13 percent, what is the current price of the share? (10 marks)

(Total: 20 marks)

QUESTION 4

As a Finance Manager, your boss had assigned you task on evaluating a long term decision which involve a new potential project, which may be developed either in Pahang or Melaka.

In order to make sure this long term decision is a good investment for the company, analysis need to be done from multiple criteria to ensure that it is a good proposal. Therefore, you need to prepare the Net Present Value (NPV), Payback Period, and Profitability Index (PI) for this project so that the analysis will uplift impressive view for the boss.

Thus, based on the information below, answer the questions that follows.

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Year/Cash flows/State	Pahang	Melaka
0	82,000	100,000
1	36,500	45,000
2	43,800	56,000
3	47,100	24,000

1) Compute the net present value (NPV) for both states, assuming your boss needed a required return of 15% for Pahang and 20% for Melaka. (10 marks)
2) Compute the payback period for both states. (8 marks)
3) Based on question **(2)** above, which state will be chosen if the target payback period is 2 years? (1 mark)
4) If this is a mutually exclusive investment, which state will be chosen? (1 mark)

(Total: 20 marks)

End of Paper

Appendix Formulae:

I. **Symbols**
PV = Present value, what future cash flows are worth today
FV_t = Future value, what cash flows are worth in the future
r = Interest rate, rate of return, or discount rate per period typically , but not always, one year
t = Number of periods typically , but not always, the number of years
C = Cash amount

II. **Future value of C invested at r percent per period for t periods**
$FV_t = C \times (1 + r)^t$
The term $(1 + r)^t$ is called the *future value factor.*

III. **Present value of C to be received in t periods at r percent per period**
$PV = C/(1 + r)^t$
The term $1/(1 + r)^t$ is called the *present value factor.*

IV. **The basic present value equation giving the relationship between present and future value is**
$PV = FV_t/(1 + r)^t$

I. **Symbols**
PV = Present value, what future cash flows are worth today
FV_t = Future value, what cash flows are worth in the future at time t
r = Interest rate, rate of return, or discount rate per period—typically, but not always, one year
t = Number of periods—typically, but not always, the number of years
C = Cash amount

II. **Future value of C invested per period for t periods at r percent per period**
$FV_t = C \times [(1 + r)^t - 1]/r$
A series of identical cash flows paid for a set number of periods is called an annuity, and the term $[(1 + r)^t - 1]/r$ is called the *annuity future value factor.*

III. **Present value of C per period for t periods at r percent per period**
$PV = C \times \{1 - [1/(1 + r)^t]\}/r$
The term $\{1 - [1/(1 + r)^t]\}/r$ is called the *annuity present value factor.*

IV. **Present value of a perpetuity of C per period**
$PV = C/r$
A perpetuity has the same cash flow every period forever.

I. **Finding the value of a bond**
Bond value $= C \times [1 - 1/(1 + r)^t]/r + F/(1 + r)^t$
where
C = Coupon paid each period
r = Rate per period
t = Number of periods
F = Bond s face value

II. **Finding the yield on a bond**
Given a bond value, coupon, time to maturity, and face value, it is possible to find the implicit discount rate, or yield to maturity, by trial and error only. To do this, try different discount rates in the formula above until the calculated bond value equals the given bond value. Remember that increasing the rate *decreases* the bond value.

I. The general case
In general, the price today of a share of stock, P_0, is the present value of all of its future dividends, $D_1, D_2, D_3, \ldots$:

$$P_0 = \frac{D_1}{(1+R)^1} + \frac{D_2}{(1+R)^2} + \frac{D_3}{(1+R)^3} + \cdots$$

where R is the required return.

II. Constant growth case
If the dividend is constant and equal to D, then the price can be written as:

$$P_0 = \frac{D}{R}$$

If the dividend grows at a steady rate, g, then the price can be written as:

$$P_0 = \frac{D_1}{R-g}$$

This result is called the *dividend growth model.*

III. Nonconstant Growth
If the dividend grows steadily after t periods, then the price can be written as:

$$P_0 = \frac{D_1}{(1+R)^1} + \frac{D_2}{(1+R)^2} + \cdots + \frac{D_t}{(1+R)^t} + \frac{P_t}{(1+R)^t}$$

where

$$P_t = \frac{D_t \times (1+g)}{(R-g)}$$

IV. Valuation Using Multiples
For stocks that don't pay dividends (or have erratic dividend growth rates), we can value them using the PE ratio and/or the price-sales ratio:

P_t = Benchmark PE ratio × EPS_t
P_t = Benchmark price-sales ratio × Sales per $share_t$

V. The required return, R, can be written as the sum of two things:

$$R = D_1/P_0 + g$$

where D_1/P_0 is the *dividend yield* and g is the *capital gains yield* (which is the same thing as the growth rate in dividends for the steady growth case).

I. The cost of equity, R_E

A. Dividend growth model approach (from Chapter 7):

$$R_E = D_1/P_0 + g$$

where D_1 is the expected dividend in one period, g is the dividend growth rate, and P_0 is the current stock price.

B. SML approach (from Chapter 11):

$$R_E = R_f + \beta_E \times (R_M - R_f)$$

where R_f is the risk-free rate, R_M is the expected return on the overall market, and β_E is the systematic risk of the equity.

II. The cost of debt, R_D

A. For a firm with publicly held debt, the cost of debt can be measured as the yield to maturity on the outstanding debt. The coupon rate is irrelevant. Yield to maturity is covered in Chapter 6.

B. If the firm has no publicly traded debt, then the cost of debt can be measured as the yield to maturity on similarly rated bonds (bond ratings are discussed in Chapter 6).

III. The weighted average cost of capital, WACC

A. The firm s WACC is the overall required return on the firm as a whole. It is the appropriate discount rate to use for cash flows similar in risk to the overall firm.

B. The WACC is calculated as:

$$\text{WACC} = (E/V) \times R_E + (D/V) \times R_D \times (1 - T_C)$$

where T_C is the corporate tax rate, E is the *market* value of the firm s equity, D is the *market* value of the firm s debt, and $V = E + D$. Note that E/V is the percentage of the firm s financing (in market value terms) that is equity, and D/V is the percentage that is debt.